



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,993	09/12/2003	Peter H. Markusch	PO-7931/MD-01-103	9336
157	7590	08/26/2005	EXAMINER	
BAYER MATERIAL SCIENCE LLC 100 BAYER ROAD PITTSBURGH, PA 15205				BISSETT, MELANIE D
ART UNIT		PAPER NUMBER		
		1711		

DATE MAILED: 08/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/661,993	MARKUSCH ET AL.
	Examiner	Art Unit
	Melanie D. Bissett	1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 20 June 2005.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-4,6-11 and 13-17 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-4,6-11,13-17 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

1. The rejection based on 35 USC 112 has been withdrawn based on the applicant's amendment. However, the rejections based on 35 USC 102 and 103 have been maintained.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Grögler et al. (US 4,483,974).
4. From a prior Office action:

The reference teaches coatings of stabilized polyisocyanate particles suspended in polyols or polyamino compounds (abstract; col. 7 lines 15-27). The coatings are applied to woven or knitted textile substrates by knife coating (col. 24 lines 14-21), which would substantially impregnate the fabrics. Note that the coatings of the invention are the same as those employed by the applicant, where the applicant shows coating the compositions onto fabrics by paint rolling. Since the same coatings are used to be applied to fabric substrates, it is the examiner's position that the fabric/polyurethane composites of Grögler's invention would inherently possess the applicant's claimed elongation, tensile strength, and water absorption properties.

Regarding claim 2, it is the examiner's position that the coated fabrics of Grögler's invention would be structurally indistinguishable from those claimed and thus would be capable of use as a liner for irrigation canals and ditches. Regarding claim 5, it is the examiner's position that, by the broadest interpretation of the claim, the coated fabrics of Grögler's invention would anticipate the limitations since they would inherently possess a degree of thickness and elasticity.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 6-12 and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Payne in view of Grögler et al.

7. From a prior Office action:

Payne discloses a process of forming a continuous structure by preselecting a liquid reactive resin forming material, a particulate, and a porous blanket material and applying the resin material onto the blanket such that the resin passes through the blanket (abstract; figure 3). Suitable porous blanket materials include woven, knit, and non-woven materials (col. 6 lines 42-48), and suitable resin materials include thermosetting polyurethanes (col. 6 lines 11-22). The blanket materials are applied to ditches to conform to the surface (figures 5-7). However, the reference is silent on the specific polyurethane compositions used.

Grögler applies as above, teaching solidifiable coatings of stabilized polyisocyanate particles suspended in polyols or polyamino compounds (abstract; col. 7 lines 15-27). The coatings are applied to woven or knitted textile substrates by knife coating (col. 24 lines 14-21), which would substantially impregnate the fabrics. Since the same coatings are used to be applied to fabric substrates, it is the examiner's position that the fabric/polyurethane composites of Grögler's invention would possess the applicant's claimed elongation, tensile strength, and water absorption properties. The one-component coatings have a high storage stability and are cured quickly after conforming to a surface by heating to a specified temperature (col. 23 lines 7-64). It is the examiner's position that it would have been *prima facie* obvious to use Grögler's thermosetting polyurethane compositions in Payne's process to produce ditch liners from a one-component, storage stable composition to form liners which cure quickly in the environment and to alleviate problems associated with mixing reactive components during application.

Regarding the coating weight and thickness of the composites, Payne teaches that a uniform thickness is to be predetermined, where the resin amount and blanket thickness determine the overall thickness of the composite (col. 4 lines 43-48). The variation of thickness and resin amount would balance processing cost with durability. Thus, it is the examiner's position that it would have been *prima facie* obvious to form the ditch liners using any coating weight and thickness necessary to optimize cost and durability properties.

Response to Arguments

8. In response to the applicant's arguments that the examiner should provide evidence that a knife-coating technique would inherently impregnate a fabric, it is the examiner's position that no reference is needed. One skilled in the art would recognize

that a knife-coating technique used in the Grögler reference would impregnate a porous fabric “thoroughly” to some degree, given the porous nature and viscosity of the coating. The knife suspended over the substrate provides pressure to force the coating into the pores of the substrate. It is again noted that the reference uses the same types of coatings and substrates as the applicants have employed. Also, no degree of impregnation has been claimed or defined in the specification.

9. Regarding the applicant’s arguments that the primary and secondary references contradict each other given their different coating techniques, it is noted that the secondary reference has been applied to teach the conventionality of using the coating on a porous substrate. One skilled in the art would expect the benefits of this coating to be present regardless of the coating technique used.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie D. Bissett whose telephone number is (571) 272-1068. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Melanie D. Bissett
Patent Examiner
Art Unit 1711

mdb